

ALS (H-42): sc-99185

BACKGROUND

The Insulin-like growth factor binding proteins, or IGFbps, are a family of seven proteins that have co-evolved with the IGFs. IGFbps serve as shuttle molecules for both IGF-I and IGF-II and confer a level of regulation to the IGF signaling system by influencing the bio-availability, concentration and distribution of IGFs in the extracellular environment. In human circulation, the IGF-binding protein complex requires ALS (IGFBP acid-labile subunit), an extracellular protein involved in receptor-ligand binding and cell adhesion. ALS, detected primarily in plasma, is involved in protein-protein interactions that result in the formation of protein complexes.

REFERENCES

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- Fischer, F., et al. 2004. Associations of Insulin-like growth factors, Insulin-like growth factor binding proteins and acid-labile subunit with coronary heart disease. *Clin. Endocrinol.* 61: 595-602.
- de Boer, L., et al. 2004. Plasma Insulin-like growth factors (IGFs), IGF-Binding proteins (IGFBPs), acid-labile subunit (ALS) and IGFBP3 proteolysis in individuals with clinical characteristics of Sotos syndrome. *J. Pediatr. Endocrinol. Metab.* 17: 615-627.
- Payet, L.D., et al. 2004. The role of the acid-labile subunit in regulating Insulin-like growth factor transport across human umbilical vein endothelial cell monolayers. *J. Clin. Endocrinol. Metab.* 89: 2382-2389.
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- Liu, T., et al. 2005. Human plasma N-glycoproteome analysis by immunaffinity subtraction, hydrazide chemistry, and mass spectrometry. *J. Proteome Res.* 4: 2070-2080.

CHROMOSOMAL LOCATION

Genetic locus: IGFALS (human) mapping to 16p13.3; Igfals (mouse) mapping to 17 A3.3.

SOURCE

ALS (H-42) is a rabbit polyclonal antibody raised against amino acids 304-345 mapping within an internal region of ALS of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ALS (H-42) is recommended for detection of ALS of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ALS (H-42) is also recommended for detection of ALS in additional species, including porcine and avian.

Suitable for use as control antibody for ALS siRNA (h): sc-60154, ALS siRNA (m): sc-60155, ALS shRNA Plasmid (h): sc-60154-SH, ALS shRNA Plasmid (m): sc-60155-SH, ALS shRNA (h) Lentiviral Particles: sc-60154-V and ALS shRNA (m) Lentiviral Particles: sc-60155-V.

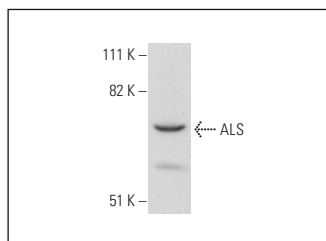
Molecular Weight of ALS: 66 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257 or Hep G2 cell lysate: sc-2227.

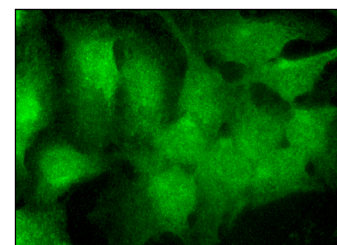
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ALS (H-42): sc-99185. Western blot analysis of ALS expression in RT-4 whole cell lysate.



ALS (H-42): sc-99185. Immunofluorescence staining of methanol-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.